Digital cameras

More fun and features for less

This season, you'll see small cameras not only in sober black and silver but also in hues such as Wasabi Green and Sunset Orange.

You'll also find even modestly priced models with features such as image stabilization, which can compensate for camera shake and minimize blurring, and face detection, which aids in portrait shots. The touch-screen technology found on the iPhone and other smart phones is showing up on the LCD screens of more digital cameras, and those screens are getting bigger.

Prices have dropped, too, especially for compacts and SLRs. Two compacts priced at or near $200 are among the CR Best Buys in our Ratings. And you can now find respectable compacts with familiar brand names for less than $200. There are also more digital SLRs priced under $1,000, including two head-to-head competitors that cost $600.

You can't always depend on salespeople to help you choose the right camera. Readers indicate that the quality of in-store help is all over the map. Indeed, when our reporter shopped at mass merchandisers, as many consumers do, one salesperson told him that there is no difference between digital and optical zoom (optical is far more useful). Another couldn't explain the differences among mechanical, optical, and simulated image stabilization (optical and mechanical are superior). A third suggested that our reporter go to a competing electronics chain for answers to his questions.

Here's what you need to know:

DON'T BUY TOO BIG OR TOO SMALL

Almost all cameras in our Ratings took decent pictures. Your choice will depend a lot on whether you favor small size or extra photographic power and flexibility. Compact cameras, too big for a pocket but small enough to fit easily in a bag, remain the best choice for most people, especially if your budget is tight.

A growing proportion of cameras now are subcompacts that fit in a pocket. They cost a bit more for the same capabilities and often come with compromises: shorter battery life, smaller controls, a narrower zoom range, and no viewfinder.

Small cameras continue to shrink and grow sleeker, and many have an LCD that dominates the back and has better screen resolution than ever. Some models have LCDs that swing out from the camera body and swivel, helping to compensate for the traditional viewfinders many models now lack.

SALES PITCH

There's no difference between optical and digital zoom.

REALITY CHECK

Optical is better because it maintains image quality by relying on the lens itself. Digital electronically magnifies a section of the image from the sensor, almost always resulting in a degraded image.

Other features trickling down from large models to quite a few small ones include manual controls and the ability to save images in the RAW format, which stores the captured image before it has been processed and converted into a file by the camera's built-in software. That maximizes your ability to control characteristics such as sharpness and color balance.

Consider a high-priced compact or SLR-like camera if you want lots of control over exposure and composition or you want to shoot close-ups of distant

CR BEST BUY **The Samsung L77, $250, offers 7-megapixel resolution, an electronic image stabilizer, and a nonprotruding 7x optical zoom—rare in a camera less than an inch thick.**

subjects. Spring for an SLR if you want those attributes and more, and can afford a variety of lenses.

As more people move to SLRs, some convenience features are also trickling up from small cameras. Examples include onscreen help guides and real-time or "live view" framing on the LCD rather than only through the viewfinder.

DON'T OVERSPEND ON THE SPECS

While some 5-megapixel models might linger in stores, most new cameras now offer at least 6 or 7 megapixels, and a growing number of point-and-shoots, or cameras with built-in lenses, offer 10 and 12. Six megapixels provide all the resolution most people need. If you often crop or dramatically enlarge your images, get at least 7 megapixels.

If you need high resolution and impeccable quality, choose one of the high-resolution compacts or SLRs that had excellent print or image quality in our tests. Shooting at a higher resolution without using a compressed format such as JPEG can fill your memory card and hard drive more quickly. This year, though, more cameras can record on a new, higher-capacity card known as SDHC. If high resolution isn't critical, a model in our Ratings with very good image quality and 6 or 7 megapixels of resolution should be fine.

Among point-and-shoot cameras, the highest ISO light-sensitivity setting has generally been 400, too low to make sharp handheld shots in dim light without a flash. Some modestly priced models have begun featuring settings of 1600 or even 3200, but results can be grainy and noticeably worse than those shot at equivalent settings using SLRs and the priciest point-and-shoots. If you're attracted to a particular subcompact or compact because of its high ISO settings, check its performance in our Ratings and make sure you can return it at no cost if its low-light results are disappointing.

BUDGET CAMERAS

Smile. You can get a good camera for $150.

While the digital cameras in our Ratings cost $200 and up, falling prices mean you can now easily spend less, even on a camera from a major manufacturer.

To see how such models stack up, we evaluated seven cameras priced from $120 to $190. All but the Polaroid were tested in partnership with International Consumer Research & Testing, a worldwide association of 37 consumer organizations of which CONSUMER REPORTS is a leading member.

Pluses. Image quality was comparable to that of many compacts and subcompacts we've tested, while falling short of the top performers'. Resolution and LCD size, at 5 to 7 megapixels and 2 to 2½ inches, respectively, are also in line with most models, while falling short of the maximums found on the priciest point-and-shoots. The same goes for optical zoom, which was mostly 3x. A couple of models had face detection, a feature only some of the rated models offered.

Minuses. As a group, the budget models are slowpokes; two are worse in shutter lag and next-shot delay than most of the rated models. Features are spartan. None offer optical or mechanical image stabilization; menus and controls are far less plentiful than on the pricier rated models.

Bottom line. All of the cameras have their drawbacks, but two are worthwhile money-saving alternatives to rated models.

Here are our recommendations:

Canon PowerShot A550

Canon PowerShot A460

Kodak EasyShare C653

Nikon Coolpix L10

Best budget choices overall:

Canon PowerShot A550 (7 MP), $150
Canon PowerShot A460 (5 MP), $130

These have lower resolution and smaller LCDs than their high-rated siblings, the Canon Powershot A640 (1) and A630 (3). And neither offers manual controls, which those models do. But their performance is solid across the board, and they have a 4x optical zoom, the highest of the group.

Competent though slower than most:

Kodak EasyShare C653 (6 MP), $140
Nikon Coolpix L10 (5 MP), $120
Pentax Optio M30 (7 MP), $190
Olympus FE-210 (7 MP), $140

These will take decent pictures, but more slowly than the best models in the Ratings. Shutter lag is 1 second (1½ seconds for the Kodak). The Nikon is the only budget subcompact tested, and it has face detection, as does the Pentax. The Olympus has a built-in help guide, but its next-shot delay is 3 seconds, the longest of the budget models.

Too slow for action-packed scenes:

Polaroid T737 (7 MP), $180

This has the biggest LCD of the group, at 3 inches, but its image quality is fair to middling. Next-shot delay is a full 5 seconds, longer than any rated model, while shutter lag is also on the slow side, at 1½ seconds.

WEIGH ZOOM TRADE-OFFS

Another feature to consider carefully is an optical zoom range that's greater than the 3x found on most cameras. (A zoom lens's range is the ratio of its highest telephoto focal length to its lowest wide-angle length. For example, a zoom lens that's considered equivalent to a film camera's 35-mm to 105-mm lens has a range of 3x.)

Greater zoom means greater weight and bulk, though a few pricey compacts manage to squeeze 10x into a package just a few ounces heavier than many basic compacts and slightly larger than many subcompacts. Don't compromise price, size, and weight for a zoom range greater than 3x unless you often shoot distant subjects such as wildlife and sporting events or need a very-wide-angle lens for landscapes or group portraits.

A greater proportion of this year's compacts and subcompacts have a range above 3x, some as high as 5x, enough to make a distant figure fill the frame. SLR-like cameras typically have a 10x to 12x zoom range. As with an SLR, they allow precise zoom and focus control using a lens ring. An SLR's zoom range depends on the lens mounted on it; the typical kit lens sold with most models offers the equivalent of about 3x magnification, though upgraded kit lenses offer more.

FORGO THE EXTENDED WARRANTY

Overall, digital cameras have been among the most reliable products in our subscriber surveys. About 5 percent of those purchased between 2004 and 2007 have ever been repaired or had a serious problem. Yet in our latest electronics buying survey, more than 70 percent of digital camera buyers were pitched an extended warranty in stores and 15 percent bought one. We think it doesn't pay to buy an extended warranty for a digital camera.

BEST TIMES TO BUY

Camera prices don't fluctuate seasonally, but most new models reach the market during two periods: March through May and September through November. During those times, many older models are replaced by more capable ones that often cost about the same.

To catch the wave of the latest models, buy between November and February or May and August. During those periods, older models might be discounted before they disappear. (A camera isn't long for this world if the manufacturer offers a limited-time rebate.) Scrutinize offers that are too good to be true. Some dealers use them to unload refurbished cameras. If you're comfortable with refurbished and the price is right, fine. But remember that the latest model, even without a steep discount, might be as good a value because it has more capabilities.

BEHIND THE BRANDS

These nine brands are generally reliable and either made a showing in our Quick Picks this issue or have major product lines. If you don't see a model in our Ratings, these profiles can help you learn about the manufacturer's lineup.

CANON

The biggest model selection. Compacts are known as PowerShots. The moderately priced PowerShot A series is less likely than the S and G lines to have features such as image stabilization. (G models use proprietary batteries; most other Canon compacts use AAs.) Canon's subcompacts are known as SD ELPHs. The Digital Rebel series helped define budget SLRs. Other SLRs include a host of pro and "prosumer" models. In August, Canon announced two high-end models, the $1,300, 10-megapixel EOS 40D, with a live preview LCD, and the $8,000, 21-megapixel EOS 1Ds Mark III. Canon also offers a wider selection of lenses than most brands.

FUJIFILM (FINEPIX)

Point-and-shoot features, from basic to sophisticated. The budget A series is the lowest priced. A step up is the F series, which offers more advanced features. The Z series are the subcompacts. FinePix models include face detection, high ISO capabilities, and practical features such as the ability to fire two quick shots, with and without flash. Most new models have a slot for the expensive xD cards and another for cheaper SD. Certain models in the SLR-like S series are large, with an optical zoom range of 10x or greater. The pricey FinePix S Pro series SLRs target pro shooters. Fujifilm doesn't offer lenses, but models accept Nikon or compatible lenses from third-party manufacturers.

HP (PHOTOSMART)

Inexpensive cameras targeted to the general consumer. Photosmart compacts, which range from the budget E and M series to the advanced R series, have a very narrow range of technical specifications. Some of the more innovative features offered in this line recently include a slimming feature, blemish removal, and pet red-eye removal. Most zooms are close to 3x; no model features image stabilization. Many models offer practical guides, including tips, in their menu interface for novices. HP doesn't offer SLRs.

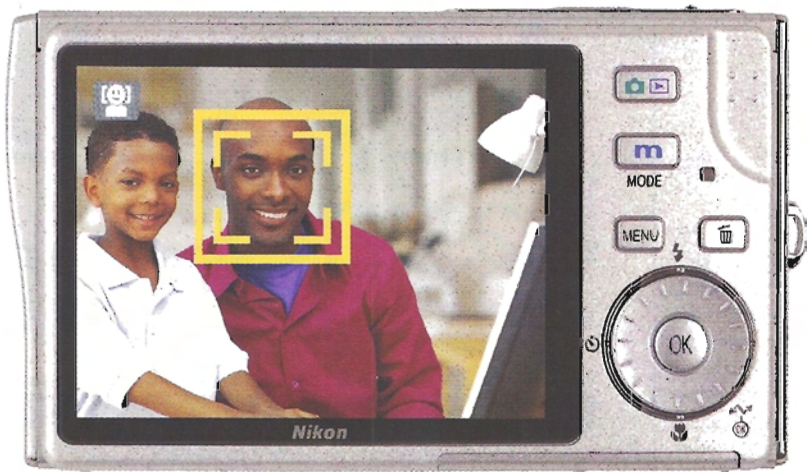
KODAK (EASYSHARE)

Cameras made simple. Kodak focuses on ease of use, as indicated by its brand tagline and features such as Smart Scene mode, which automatically selects specialty modes. The budget C series includes some of the cheapest compacts available. Higher-end Z-, P-, and newer M-series compacts have longer zooms and more sophisticated features. The V series of subcompacts offers some of the most unusual point-and-shoot features, including Bluetooth wireless and innovative dual-lens/dual-sensor designs. Kodak doesn't offer SLRs.

FACE DETECTION Technology puts portraits in focus

More than the birthday cake, the vacation backdrop, even the family dog, the human face is the focal point for most photographs. So a growing number of digital cameras, including about a dozen of our rated point-and-shoots, include a relatively new feature, dubbed face detection, that tries to set the focus, exposure, and color balance so that faces appear sharp, well exposed, and the proper color.

In some cameras, you must turn the feature on before you can use it. In others, it's enabled at the factory, but you can turn it off. All work pretty much the same way: Software analyzes the image, locates any faces in the frame, and places a little square icon around each in the LCD or electronic viewfinder. The largest face is usually selected as the focal point. Face detection is different from the portrait setting found on many point-and-shoots, which tries to make a face stand out from the background but doesn't optimize its sharpness, exposure, or color balance.



LOCKING IN The number of faces a camera can detect varies by brand; some claim up to 15. Many models will also track faces as they move within the frame.

In our tests, the detection feature worked adequately on all the cameras. However, in scenes where lighting was uneven or distances varied between subjects, using face detection caused other subjects to appear less sharp, too dark, or too light—an unavoidable consequence.

If you take lots of pictures of people, face detection is a nice feature to have. Because it's not yet available on the majority of models, for now you might have to decide whether an otherwise-fine camera's price, performance, and other features outweigh its lack of face detection. The following cameras in the Ratings offer face detection: Fujifilm (7, 30, 40); Nikon (8, 13, 36); Canon (10, 12, 24, 25); Sony (21); and GE (37). Other cameras with face detection include the 5-megapixel Nikon Coolpix L10, $120, with a 2-inch LCD; the 7-megapixel Pentax Optio T30, $300, with a 3-inch LCD; and the 8-megapixel Fujifilm Finepix F40fd, $250, with a 2.5-inch LCD.

NIKON

SLR leader also offers innovative point-and-shoots. Coolpix compacts and subcompacts are divided into three series—a budget L, step-up S, and high-end P. Nikon has introduced more of these models with wireless features than any other company. Like Canon's SLR lineup, Nikon's D series offers cameras for every SLR user and budget and a wide range of lenses. Nikon's SLR bodies are typically less expensive than Canon's. In August, Nikon introduced two high-end models: the $1,800, 12-megapixel D300 with a live preview LCD and the $5,000, 12-megapixel D3.

OLYMPUS

Groundbreaking technologies in niche markets. Budget FE series compacts have built-in help guides and emphasize simple operation. Olympus recently offered some groundbreaking technologies in both point-and-shoot lines and Evolt SLRs. High-end SP compacts have featured very long zooms. Select Stylus subcompacts have been water-resistant, waterproof, shockproof, and crushproof. All point-and-shoots use the slightly more expensive xD memory cards. Evolt SLRs were the first with live-preview LCDs. Olympus offers a reasonable range of lenses.

SAMSUNG

Up-and-comer in compacts and subcompacts. Has produced some very inexpensive compact digital cameras. Its pricier subcompact NV series includes an innovative navigation interface. The GX series of SLRs are essentially rebranded Pentax K-series SLRs. Samsung offers a limited selection of lenses.

PANASONIC (LUMIX)

On the move with image stabilization. Every Lumix, from the top SLR-like FZ series cameras to the budget LZ and LS series, has optical stabilization. FX-series subcompacts feature several modes and auto features; high-end LX can capture photos in 16:9 aspect mode, while the TZ-series compacts sport superzooms. Lumix cameras offer great value when they combine optical image stabilization with innovations such as intelligent ISO, which automatically raises the camera sensor's sensitivity when it detects motion, allowing faster shutter speed. Panasonic has been among the more reliable point-and-shoot brands. Panasonic offers two L-series SLR bodies and some lenses.

SONY

Premium style, premium price. Sony offers innovations at relatively high prices. Cyber-shot compacts and subcompacts offer distinctions such as touch screens and sleek bodies. In recent tests, Sonys have beaten most brands in shutter lag and next-shot delay, two common complaints. All Sony point-and-shoots use proprietary (and pricey) Memory Stick storage. The W and S series are budget lines. High-end H- and G-series compacts and premium N- and T-series subcompacts tend to be pricier than other brands. A newcomer to SLRs, Sony offers one series, Alpha, with two bodies and a reasonable range of lenses.

CR Quick Recommendations

The **Ratings** list models by overall performance. The standout **Quick Picks** all produced images that were excellent or very good—a difference that's subtle even on most larger prints. All models come from reliable brands. For some models, we have noted a newer successor that we haven't yet tested.

QUICK PICKS

Best values for most people:

2 Canon (7 MP) $270
3 Canon (8 MP) $200, CR Best Buy
7 Fujifilm (6 MP) $220, CR Best Buy

All these compacts have manual controls. The Canon (2) has excellent next-shot delay, very good shutter lag, 6x optical zoom, an optical viewfinder, an image stabilizer, and manual focus. (Also available: the 8-megapixel PowerShot A720 IS, $250, with maximum ISO of 1600 and face detection.) Its brandmate (3) offers excellent picture quality, very good next-shot delay, 4x optical zoom, an optical viewfinder, and manual focus, but only fair shutter lag. (Also available: the 12-megapixel PowerShot A650 IS, $400, with 6x optical zoom, image stabilization, and face detection.) The Fujifilm has very good next-shot delay, good shutter lag, and an image stabilizer.

For flexible editing and composition:

10 Canon (10 MP) $500

This has 6x zoom range, excellent next-shot delay, good shutter lag, an image stabilizer, manual controls, manual focus, optical viewfinder, and face detection. (Also available: the 12-megapixel PowerShot G9, $500, with RAW-file capability and 3-inch LCD.)

For a camera that fits in a pocket:

20 Sony (10 MP) $310
21 Sony (7 MP) $250
22 Panasonic (7 MP) $350
24 Canon (7 MP) $310
26 Samsung (7 MP) $250, CR Best Buy

The Sonys both have excellent picture quality, excellent next-shot delay, and very good shutter lag. The Sony (20) has manual controls. The Panasonic has excellent next-shot delay, very good shutter lag, wide-angle capability, and an optical image stabilizer. The Canon has excellent next-shot delay, very good shutter lag, wide-angle capability, optical viewfinder, and an optical image stabilizer. (Also available: the 8-megapixel SD870IS ELPH, $400, with a 3-inch LCD but no viewfinder.) The Samsung has very good next-shot delay, good shutter lag, 7x optical zoom, an image stabilizer, and MPEG4 video.

2 Canon

4 Canon

3 Canon

5 Olympus

Ratings small cameras

• **Availability** Most models at stores through February 2008.

Excellent · Very good · Good · Fair · Poor

Within types, in performance order. Blue key numbers indicate Quick Picks.

Key number	Brand & model	Price	Overall score (0 P F G VG E 100)	Megapixels	Weight (oz.)	Optical zoom	LCD size (in.)	Flash range (ft.)	Picture quality	Battery life	Shutter lag	Next-shot delay	Image stabilizer	AA batteries	Wide angle	Manual controls
	COMPACT CAMERAS *For those who want the basics at a low price or advanced features.*															
1	**Canon** PowerShot A640	$300	76	10	12	4x	2.4	13.8	◓	◓	○	●		•		•
2	**Canon** PowerShot A710 IS	270	76	7	9	6x	2.5	11.5	◓	◓	◓	●	•	•		•
CR BEST BUY 3	**Canon** PowerShot A630	200	75	8	12	4x	2.4	13.8	●	◓	◒	◓		•		•
4	**Canon** PowerShot S3 IS	290	75	6	18	12x	2	17.1	◓	●	○	●	•	•		•
5	**Olympus** SP-510 UZ	240	74	7	15	10x	2.4	14.8	◓	●	◒	●	•	•		•
6	**Fujifilm** FinePix E900	230	73	9	9	4x	2	12.1	●	◓	○	●		•		•
CR BEST BUY 7	**Fujifilm** FinePix F31fd	220	73	6	7	3x	2.4	21.3	◓	●	○	◓	•			•
8	**Nikon** Coolpix S10	250	73	6	9	10x	2.5	17.7	◓	◓	○	●	•			
9	**Panasonic** Lumix DMC-TZ3	350	73	7	9	10x	3	13.8	◓	◓	◒	◓	•		•	
10	**Canon** PowerShot G7	500	72	10	13	6x	2.4	13.1	◓	○	○	●	•			•
11	**Sony** Cyber-shot DSC-G1	600	72	6	8	3x	3.4	9.2	●	◓	◓	●	•			
12	**Canon** PowerShot TX1	500	71	7	9	10x	1.8	6.6	◓	○	◒	●	•			
13	**Nikon** Coolpix P5000	400	68	10	8	3.5x	2.4	26.2	◓	○	◒	◓	•			•
14	**HP** Photosmart R927	260	67	8	7	3x	3	15.6	◓	○	◓	●				•
15	**Olympus** SP-550UZ	500	65	7	16	18x	2.4	14.8	○	◓	◒	◓	•	•	•	•
16	**HP** Photosmart R837	230	64	7	6	3x	3	13.5	○	○	◓	●	•			
17	**Samsung** NV7 OPS	260	60	7	10	7x	2.4	19	○	○	◒	◒	•			•
18	**Olympus** FE-200	250	55	6	7	5x	2.7	8.2	○	◓	◒	◒	•		•	
19	**Olympus** Stylus 1000	220	54	10	6	3x	2.5	17.1	◒	○	◒	○	•			

Guide to the Ratings

Overall score is based mainly on picture quality, the presence of useful features, battery life, and weight. Displayed scores are rounded; models are listed in order of precise overall score. **Megapixels** is the resolution in millions of pixels. **Weight** includes battery and included memory. **Optical zoom** refers to the ratio of focal lengths. **LCD size** is measured diagonally. **Flash range** is the manufacturer's claimed maximum distance in auto mode with lens at wide angle. **Picture quality** is based on expert judgments on a reference monitor of images made with each camera's best resolution and compression settings. **Battery life** indicates how many highest-quality photos were taken with the batteries supplied (if they were proprietary ones) or rechargeable nickel-metal hydride AAs; alternate shots used flash, and the zoom lens was racked in

7 Fujifilm

22 Panasonic

9 Panasonic

24 Canon

10 Canon

26 Samsung

Quick Picks *continued*

If a long zoom is a priority:

4 Canon (6 MP) $290
5 Olympus (7 MP) $240
9 Panasonic (7 MP) $350

All have an image stabilizer. The Canon has a 12x optical zoom, excellent next-shot delay, manual controls, and manual focus, and it can zoom while recording video, but it is fairly heavy. (Also available: the 8-megapixel S5 IS, $500, with face detection, 2.5-inch LCD, and compatibility with SDHC memory cards.) The Olympus has a 10x optical zoom, excellent next-shot delay, manual controls, and manual focus, but only fair shutter lag, and it is fairly heavy. (Also available: the 8-megapixel SP-560 UZ, $500, with an 18x optical zoom with wide-angle capability, and face detection.) The Panasonic has a 10x optical zoom with wide-angle capability and very good next-shot delay but only fair shutter lag.

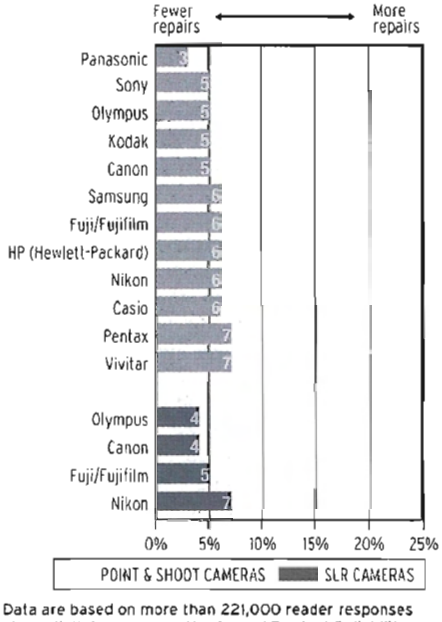
Key number	Brand & model	Price	Overall score (0 P F G VG E 100)	Specifications: Megapixels	Weight (oz.)	Optical zoom	LCD size (in.)	Flash range (ft.)	Test results: Picture quality	Battery life	Shutter lag	Next-shot delay	Features: Image stabilizer	AA batteries	Wide angle	Manual controls
	SUBCOMPACT CAMERAS *For those who need a camera that fits in a purse or pocket*															
20	**Sony** Cyber-shot DSC-N2	$310	75	10	6	3x	2.9	15.7	◓	◓	◓	◓				•
21	**Sony** Cyber-shot DSC-W80	250	73	7	5	3x	2.4	10.8	◓	◓	◓	◓	•			
22	**Panasonic** Lumix DMC-FX30	350	72	7	5	3.6x	2.4	16.4	◓	◓	◓	◓	•		•	
23	**Sony** Cyber-shot DSC-T50	330	72	7	6	3x	3	11.2	◓	◓	◓	◓	•			
24	**Canon** PowerShot SD800IS ELPH	310	71	7	6	3.8x	2.4	13.1	◓	◓	◓	◓	•		•	
25	**Canon** PowerShot SD900 ELPH	340	70	10	7	3x	2.4	16.7	◓	○	○	◓				
CR BEST BUY 26	**Samsung** L77	250	70	7	6	7x	2.4	11.5	◓	○	○	◓	•			
27	**Casio** Exilim Card EX-S770	260	69	7	5	3x	2.8	12.8	◓	○	◓	◓	•			
28	**Samsung** NV10	260	68	10	6	3x	2.4	14.8	◓	○	◒	◓	•			•
29	**Casio** Exilim EX-V7	270	67	7	6	7x	2.4	7.2	○	○	◓	◓	•			•
30	**Fujifilm** FinePix Z5fd	180	66	6	5	3x	2.4	11.5	◓	○	○	◓	•			
31	**Kodak** EasyShare V803	200	65	8	6	3x	2.4	9.8	◓	○	◒	◓	•			
32	**Olympus** Stylus 710	250	65	7	4	3x	2.4	13.1	◓	○	◒	◓	•			
33	**Casio** Exilim EX-Z1000	230	62	10	6	3x	2.8	11.8	○	◓	◓	◓	°			
34	**Pentax** Optio A10	260	62	8	5	3x	2.4	16.4	◓	○	◒	○	·			
35	**Samsung** NV3	200	62	7	6	3x	2.4	11.2	◓	○	◒	○	•			
36	**Nikon** Coolpix S50c	350	61	7	5	3x	3	19.7	◓	○	◒	○	÷			
37	**GE** G1	200	59	7	5	3x	2.4	6.2	○	○	◒	◓	•			
38	**Olympus** Stylus 770SW	380	59	7	6	3x	2.4	12.5	○	○	◒	◓	•			
39	**Olympus** Stylus 740	250	54	7	5	5x	2.4	12.5	◒	○	◒	◓				

and out. Models that shot at least 513 were rated excellent; 256, very good; and 128, good. **Shutter lag** is how quickly the camera can take its first shot once powered up. The fastest were virtually instantaneous; the slowest took 1 second or longer. **Next-shot delay** is how quickly the camera can take its next photo. Models at least as quick as 1 second were rated excellent; 3, very good; 5, good; and 7, fair. **Image stabilizer** shows which have that steadying feature. **AA batteries** denotes cameras that use that size; most of those don't include a charger. Cameras with proprietary batteries always include a charger. **Wide angle** shows which have a lens that zooms as least as wide as a 28-mm-equivalent film-camera lens. **Manual controls** refers to settings that let you adjust shutter speed and lens opening. **Price** is approximate retail.

Brand repair history

The graph shows the percentage of the following brands of digital cameras bought between 2004 and 2007 that have been repaired or had a serious problem. Differences of less than 3 points are not meaningful. Models within a brand might vary, and changes in design or manufacture might affect reliability. Still, choosing a brand with a good repair history can improve your odds of getting a reliable model.

DIGITAL CAMERAS



Data are based on more than 221,000 reader responses about digital cameras to the Annual Product Reliability Survey conducted by the Consumer Reports National Research Center. Data are adjusted to eliminate differences linked solely to the age and use of the product.

CR Quick Recommendations

All models produced excellent or very good images. Image quality scores for SLRs and picture quality scores for SLR-like models are not directly comparable because they are based on different test methods. All the SLRs in the Ratings except the Canon (49) were tested in partnership with International Consumer Research & Testing, an association of 37 consumer organizations including Consumers Union.

Reliability. Based on subscriber-survey data, Olympus, Canon, Fujifilm, and Nikon have been reliable SLR brands.

QUICK PICKS

Among SLR-like models, capable performance at a modest price:

40 Fujifilm (6 MP) $300
42 Fujifilm (9 MP) $430

These offer longer flash range and more precise control over zoom and focusing than a compact, at lower cost than many SLRs. Both have very good battery life, 10.7x optical zoom, image stabilizer, wide-angle zoom, and manual controls, and can zoom while recording video, but they are fairly heavy. The Fujifilm (40) has excellent picture quality, very good shutter lag, and excellent next-shot delay. If high resolution trumps speed, try the newer Fujifilm (42), which has very good picture quality and very good next-shot delay but only fair shutter lag.

For an easy-to-use SLR:

47 Nikon (10 MP) $800
48 Olympus (10 MP) $800
51 Nikon (6 MP) $600, CR Best Buy

All three are compact and lightweight for an SLR and are very easy to use, with very good image quality and excellent battery life. Both Nikons include in-camera image correction, such as cropping and filter effects, plus software-based dust removal. They also feature a 2.5 percent spot meter and use the same metering system as their pricier sibling, the Nikon (44), a fine and rugged 10-megapixel model that accepts a wide variety of lenses. The main advantages of the Nikon (47) over the Nikon (51) are greater resolution; the ability to shoot 3 frames per second, instead of 2.5, continuously for up to 100 JPEG images; and a low ISO setting of 100 instead of 200. The Olympus includes through-the-lens live view with autofocus, with up to 10x magnification with manual focus. It also features hardware-based dust removal, fully customizable RAW+JPEG, spot metering with a shadow- and highlight-based spot, and unlimited continuous shooting on a fast card with HQ-quality JPEG.

40 Fujifilm

42 Fujifilm

51 Nikon

Ratings

• **Availability** Most models at stores through February 2008.

Excellent · Very good · Good · Fair · Poor

SLR-like cameras

In performance order. Blue key numbers indicate Quick Picks.

Key number	Brand & model	Price	Overall score (0–100; P F G VG E)	Megapixels	Weight (oz.)	Optical zoom	LCD size (in.)	Flash range (ft.)	Picture quality	Battery life	Shutter lag	Next-shot delay	Image stabilizer	AA batteries	Wide angle	Manual controls
	For those who need SLR-style features but a built-in lens.															
40	**Fujifilm** FinePix S6000fd	$300	77	6	24	10.7x	2.4	27.2	●	◒	◒	●	•	•	•	•
41	**Leica** V-LUX 1	850	74	10	26	12x	1.9	24.3	◒	◒	○	●				•
42	**Fujifilm** FinePix S9100	430	70	9	26	10.7x	2	18.4	◒	◒	◒	◒	•	•	•	•

Overall score includes the same factors used in rating small cameras (page 40).

SLR cameras

In performance order. Blue key numbers indicate Quick Picks.

Key number	Brand & model	Price	Overall score (0–100; P F G VG E)	Megapixels	Weight (oz.)	Flash range (ft.)	Image quality	Battery life	Ease of use	Image stabilizer	AA batteries	Charger	ISO settings
43	**Canon** EOS-30D Digital [1]	$1,000	74	8	28	12.1	●	●	●			•	100-3200
44	**Nikon** D80 [1]	1,000	74	10	24	12.1	◒	●	●			•	100-3200
45	**Sony** alpha DSLR-A100K	800	73	10	22	11.2	◒	●	●	•		•	100-1600
46	**Nikon** D200 [1]	1,700	71	10	33	11.2	●	●	●			•	100-1600
47	**Nikon** D40X	800	71	10	19	14	◒	●	●			•	100-3200
48	**Olympus** Evolt E-410	800	70	10	16	11.2	◒	●	●			◦	100-1600
49	**Canon** Digital Rebel Xti	800	70	10	20	12.1	◒	●	●			•	100-1600
50	**Pentax** K10D	800	70	10	28	10.2	◒	●	●	•		•	100-1600
CR BEST BUY 51	**Nikon** D40	600	70	6	18	14	◒	●	●			•	200-3200
52	**Pentax** K100D	600	68	6	23	14.8	◒	●	●	•	•		200-3200
53	**Sigma** SD 14 [1]	1,200	62	4.65	28	10	○	●	◒			◦	100-1600

[1] *Price is for body only.*

Guide to the Ratings

Overall score is for the body only and is based on image quality, versatility, weight, ease of use, zooming capability, battery life, and useful features. Displayed scores are rounded; models are listed in order of precise overall score. **Megapixels** is in millions of elements. **Weight** is for the body only, including battery. **Flash range** is the maximum claimed for a well-lighted subject. SLR **image quality** is based on expert judgments using images taken at the best resolution and compression and viewed on a reference monitor, and on objective analytical test data. **Battery life** reflects the number of high-resolution photos taken with the batteries supplied, if the camera uses a proprietary size, or with rechargeable nickel-metal hydride AAs; 250 or more was judged excellent. **Image stabilizer** shows models with that steadying feature. **AA batteries** denotes models using those. **Charger** is for the batteries. **ISO settings** indicates the sensitivity range. **Price** is approximate retail (with lens). Models were tested with a high-quality, 50-mm same-brand lens. Kit lenses commonly bundled are: Canon 18-55 mm EF-S, (Nikon D80) AF Zoom-Nikkor 18-135 mm, Sony 18-70 mm DT, (Nikon D200) AF Zoom-Nikkor ED 18-55 mm, (Nikon D40x, D40) AF-S DX Zoom-Nikkor 18-55 mm, Olympus 14-42 mm, Pentax DA Zoom 18-55 mm, and Sigma 18-50 mm.